Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

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1.   (Cancelled)

2.   (Previously Presented) The method of claim 4, wherein the element is a model component of a computer-aided design model.

3.   (Original) The method of claim 2, wherein the computer-aided design model is a model of an architectural structure.

4.   (Previously Presented) A method of propagating changes made to a design model having one or more elements, comprising:

identifying a change to a first element;

creating a first step based on the structure of the first element or on a relationship between the first element and another element or elements;
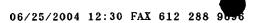
creating a second step based on the first step and the structure of one of the elements or on a relationship between two of the elements;

executing the steps to change at least one or more elements to produce a model that accurately reflects the change to the first element; and

sorting at least some of the steps before executing the steps.

5.   (Original) The method of claim 4, wherein the sorting is conducted using a depth-first search sorting method.
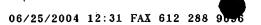
6.   (Previously Presented) The method of claim 4, wherein the steps are stored in a step repository.

7.   (Previously Presented) The method of claim 4, wherein one of the steps is a nul step.

8.   (Original) The method of claim 7, wherein the nul step instigates regeneration.

9.   (Previously Presented) The method of step 4, further comprising providing an atom associated with the first element, the atom marking changes made to the first element and expressing a dependency between one or more steps.

10.   (Previously Presented) The method of step 4, wherein the second step depends on a relationship between the first element and a class of elements.

11.   (Previously Presented) The method of claim 4, further comprising executing geometry steps associated with the first step or the second step.

12.   (Previously Presented) The method of claim 4, further comprising identifying a locked step and limiting the execution of the locked step.

13.   (Previously Presented) The method of claim 4, further comprising generating an error signal if the first step or the second step cannot be sorted.

14.   (Cancelled)

15.   (Previously Presented) A system for regenerating a design model, comprising:
         a model element;

a step propagator that receives a first step that represents changes in the model element, and produces a second step that represents other changes in the model element that are dependent on the first step;

a step executer that executes the first step and the second step; and

a step sorter that sorts the first step and the second step according to dependencies between the steps.

16.   (Previously Presented) The system of claim 15, further comprising an element table that stores the model element.

17.   (Previously Presented) The system of claim 15, further comprising an atom associated with the model element, the atom linking the model element to the first step.

18.   (Previously Presented) A method of propagating changes through a plurality of elements in a model, comprising:

analyzing changes in a first element;

generating a first step to carry out at least some of the changes in the first element;

generating a second step based on a predefined relationship between the first element and one or more other elements, or on changes in a predefined relationship between the first element and one or more other elements;

executing the first step and the second step on the plurality of elements to reflect the changes in the first element and the relationship between the first element and the one or more elements; and

sorting the first step and the plurality of steps to ensure that each step is executed after steps on which it depends are executed.

19.   (Original) The method of claim 18, wherein the plurality of elements are elements in a computer-aided design model.
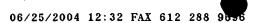
20.   (Original) The method of claim 18, wherein the second step is one of a plurality of steps that can effect changes to the same element, and the second step is selected from the plurality of steps based on the first step.

21.   (Original) The method of claim 20, wherein the second step is selected from the plurality of steps based on the generation of other steps.

22.   (Cancelled)

23.   (Original) The method of claim 18, wherein one of the steps is a nul step whose execution does not affect the model.

24.   (Original) The method of claim 18, wherein locked steps are not executed.

25.   (Original) The method of claim 18, wherein the plurality of steps is generated by prediction.

26.   (Original) The method of claim 18, wherein the plurality of steps is selected from among a group of possible pluralities of steps.

27.   (Original) The method of claim 18, wherein all of the steps on one element are executed before any steps on the next element.

28.   (Original) The method of claim 18, wherein the first plurality of steps depends on the execution of the first step.

29.   (Original) The method of claim 18, further comprising verifying the elements after execution for constraint satisfaction.

30.   (Previously presented) A method for updating data for a computer model for graphical display, comprising:

analyzing an element in the computer model to determine whether the element has been touched by a change in the model;

associating the element with one or more steps that effect the change to the model;

creating one or more additional steps that propagate changes to the computer model based on

relationships between the element and other elements in the computer model;

sorting the one or more steps and the one or more additional steps to eliminate

interferences among the steps;

executing the sorted steps.

31.   (Original) A method of propagating changes made in one data element to a related data element, comprising:

accumulating changes made in the one data element;

identifying a predetermined number of possible mutually exclusive sets of changes that may be made in the related data element;

selecting the most appropriate set of changes by employing a predetermined selection standard;

testing the selected set of changes to determine whether it is an appropriate set of changes.

32.   (Original) A method of propagating a change made to an element in a computer-aided design model, comprising:

identifying an atom associated with the element;

generating a first step to carry out the change;

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retrieving relationship information that defines predetermined relationships among
elements in the model;

generating propagated steps that depend on the change and the relationship information;
sorting the steps; and

executing the steps to properly reflect the change to the element and to related elements.